

## **2003-2004 Cycle**

### **NCLB, Title II, Part A (3): Improving Teacher Quality Professional Development Competitive Grant Program**

#### **Programs Recommended for Funding: Approval by Grant Categories**

##### **Category 1: Partnership for Professional Development in Mathematics**

	<b><u>Amount Requested</u></b>	<b><u>Amount Recommended</u></b>
<b>University of Michigan</b>	\$199,637	\$171,947

040290-101

**Project Director: Eleanor Linn**

734-764-7243

Family Math, Middle School Family Math, Family Science, Playtime is Science (combined with Family Math for Young Children) are nationally recognized, inquiry-based models (preK-8) that help improve parent involvement in their children's mathematics and science education.

Participating school form teams of educators and parents who learn how to plan, implement, and sustain parent/child classes in their communities. This project will provide additional outreach and mentoring support to help 40 of the lowest achieving/high poverty schools in Michigan that have never participated in these programs, to implement parent/child classes. The schools are in Detroit, the Flint area and south central Upper Peninsula. In Detroit, 6 of the schools have high concentrations of Spanish speaking children; Detroit and Flint have large numbers of African American children; in the UP focus is on working with Native American families. Cultural issues of working with families in these areas will be addressed. The activities are culturally affirming and provoke deep reflection on content issues. Parent/child classes model and encourage parents to scaffold their children's engagement in these complex and highly engaging activities, which, in turn, influence children's engagement in these complex and highly engaging activities, which, in turn influence children's motivation and success, thus indirectly raising parents' and teachers' expectations of students ability.

**Oakland Michigan University**

040290-102

\$196,107

\$168,387

**Project Director: Sandra Alber**

248-370-3080

Maybury Multicultural School, a Detroit Public School, struggles with the critical need to prepare poor, underrepresented students for success in business and industry. The poverty rate at Maybury is 93%. The school serves a Mexican American Community, where 85% of the 635 students speak Spanish. The mobility rate is 45%. The school has not met AYP goals for 3 years. Now, Maybury joins with Oakland University to address the pressing needs of teachers for high quality, sustained, focused professional development to increase mathematics achievement.

The cyclical model begins by modeling research- based pedagogy in biweekly workshops focusing on math content, research based pedagogy, appropriate use of technology and curriculum standards. Workshops are followed by classroom implementation followed by study group and personal reflection, which shapes the next workshop to begin the cycle again. The cycle allows staff time and opportunity to deepen and broaden their math content and knowledge and pedagogy expertise. Peers and university faculty monitor in classroom visitations and observations. As the cycle repeats, teacher leader emerge and are nurtured. Teachers assume leadership positions in study groups and provide constructive, research-based feedback to peers in coaching sessions. Study groups provide an arena for building a professional, collegial learning community.

**Eastern Michigan University**

040290-103

\$199,982

\$186,122

**Project Director: Cristina Jose-Kampfner**

734-487-3090

**“She Does Math”** promotes interest, achievement and perseverance in mathematics. This 2-year project brings together 50 girls at the Academy of Americas and 50 girls at Cesar Chavez, their mothers, 10 mathematics teachers, female EMU college of Education Professors, College of Arts and Science’s mathematics professors, preservice secondary mathematics preservice teachers, and Latinas in mathematics-related careers. The goal is to build a pipeline of support for Latinas, their mothers and teachers by offering over 2-years (per schools): Two Saturday brunch meetings with female mathematics faculty, admission personnel, and mathematics perservice teachers at EMU. One Saturday mother/daughter field trips to Cranbrook Science Museum and Detroit Science Center. Two Saturday mother/daughter brunch meetings at schools with Latinas in mathematics-related careers. Fifteen after school clubs with preservice for 50 adolescent Latinas and five mathematical teachers. Two family mathematics evenings for mothers and adolescent Latina daughters presented by preservice mathematics and inservice teachers. Six evenings per school for mothers with potluck dinners with Dr. Cristina Jose-Kampfner. Eight day long visits to teachers by an educational technologists (per school).

**Central Michigan University**

040290-104

\$198,396

\$166,652

**Project Director: Amy Voege**

989-774-3094

The Middle Grades Connected Mathematics project is designed to take a three-pronged approach to increasing teacher efficacy and student achievement in middle-school Mathematics at four-high-poverty, low-achieving middle-grades schools. First, the Project proposes to identify and rectify teacher’s struggles with specific Mathematics content; second, Project staff will provide professional development on effective instructional strategies and on reading instruction within the context of Mathematics classrooms, so that teachers can more effectively teach content; and, the Project will provide sixth grader teachers with the opportunity to pilot a standards-based integrated curriculum whose instructional strategies are specifically designed around the forgoing professional development. It is expected that this two-year project will result in greatly improved teacher efficacy, which will ultimately lead to increased student achievement in Mathematics.

**Eastern Michigan University**

040290-106

\$190,810

\$176,950

**Project Director: Joanne Canigila, Elaine Richards, Ellen Hoffman**

734-487-3090

The *Linking Teacher Knowledge with Student Learning* project provides a focused, systematic of partnership that will have a positive influence on the performance of non-endorsed middle school mathematics teachers; be advantageous to in-service teachers; and above all, significantly increase student learning. Stakeholders include Eastern Michigan University (EMU) College of Arts and Sciences (CAS) and College of Education (COE); Ypsilanti Public Schools and Willow Run Community Schools; Livingston and Washtenaw Mathematics and Science Center (LAWMASC); and Washtenaw Intermediate School District.

**Saginaw Valley University**

040290-108

\$200,000

\$186,140

**Project Director: Dr. Douglas Hansen**

989-964-7323

The primary purpose of the project is to identify professional development needs for mathematics teachers in the K-12 continuum and develop an individualized self-improvement professional development plan for each teacher. Teachers needs will be matched with existing programs or through the development of new workshops, courses, and presentations. Constructivist teaching, teacher mentoring through demonstration and modeling, the integration of technology, and an increased ability to assess student achievement are key components of the project. Increased student achievement in math is the major goal of the project.

**University of Michigan- Dearborn**

040290-109

\$200,000

\$186,140

**Project Director: Roger Verhey**

313-593-5513

Project goals are to increase the content and pedagogical knowledge of teachers for teaching and to help districts develop a curriculum guide that defines what students should know and be able to do. The curriculum guide will be correlated with the MCF including its teaching and learning section. Its intent is to improve the quality of participating districts' instructional programs to support improved student achievement. The guide will build student performance expectations over time to meet adequate yearly progress requirements of Education Yes! And No Child Left Behind. The teacher knowledge part will be accomplished through elementary and middle school mathematics institutes. Institutes courses of 30 contact hours will focus on the standard-based mathematics for the particular grade band and deepen teacher in every classroom by the 2005-2006 school year. Roger Verhey and Charles Allen of the Center for Mathematics Education at the University of Michigan-Dearborn with mathematics consultants from Wayne RESA and Oakland Schools will partner with educators from twelve local districts to increase the content and pedagogical knowledge of teachers and evaluate and revise district programs.

## **Category 2: Partnership for Professional Development in Science**

	<b><u>Amount Requested</u></b>	<b><u>Amount Recommended</u></b>
<b>Grand Valley State University</b> 040290-204	\$153,671	\$139,811
<b>Project Director: Dr. Jann Joseph</b> 616-331-3454		

Professional Development for Conceptual Change in Middle School Science will bring together GVSU science and education faculty, RMSC staff, in-service and pre-service teachers, school principals, and district science coordinators in a collaborative effect to improve student performance. We will improve the delivery and assessment of science in Steele Middle School in Muskegon, and Northeast and Burton Middle Schools in Grand Rapids.

We will understand the background and existing knowledge of participating teachers and build on this knowledge to introduce relevant teaching and learning strategies. In our exploration phase we will guide teachers to construct new meaning and later build on concepts learned in various meetings, workshops, and conferences. As our teachers implement these new strategies in their classrooms, we will provide guidance and support and many opportunities for reflection on their practice.

Evaluation will be formative and summative. Our standards-based workshop will end with a time to reflect on the key concepts of the event and allow teachers time to openly and confidently express their concerns, and discuss way to make their professional development more meaningful. We will contract SAMPI and/or one of their approved evaluators to provide summative data and student learning in the classroom.

<b>Lawrence Technological University</b> 040290-206	\$199,994	\$100,000
<b>Project Director: Anthony F. Sky</b> 248-204-3606		

The BSK+Project will consist of two Cadres. Cadre Two includes BSK+ selected 4<sup>th</sup> and 5<sup>th</sup> grade teachers from Title 1 and AYP buildings in Wayne-Westland and Taylor School district. Participation in this project provides the opportunity for them to become more proficient in teaching science. Through their involvement in a professional learning community, teachers will interact using the following documents: Michigan Curriculum Framework, MI BIG< CliMB, GLIG, CAT Solutions, CWL ToolKit, and *Understanding by Design*. These materials provide successful strategies and standards of teaching, learning, professional development, and assessment for teachers to internalize. The content strand will deal with supporting curriculum resources supplemented with instructional technology. Each teacher will develop a lesson that will be peer edited and then taught in their own classroom. The lessons, learning, and artifacts will be posted to their own and also on the project web site. In Cadre One, the BSK+Project will continue to sustain a professional learning community with participants from the preceding BSK Grant. This Cadre will continue their learning community with participants from the preceding BSK Grant. This Cadre will continue their learning community activities and additionally address more instructional technology, leadership development, and mentoring skills. Mentors will be developed and selected to mentor members of Cadre Two.

**Michigan Technological University**

040290-210

\$193,882

\$180,022

**Project Director: Chris S. Anderson**

906-487-2460

The 2002-2005 Partnership in Professional Development in Science (PPDS) will consist of intensive, graduate-level Institutes focused on science education. The laboratory-based, experiential Institutes use the Michigan Curriculum Framework Standards as a guide with the goal of enhancing the ability of teachers to engage students in science and increase the achievement of K-12 students. Target group teachers are from high need rural schools in the Upper Peninsula and the GRACEP consortium of Grand Rapids area and West Ottawa schools.

**Michigan State University**

040290-211

\$199,785

\$185,668

**Project Director: Dr. Norman Lownds**

517-355-8729

The BIG lesson is a model of teaching and learning that makes a real world, hands-on, personal connection for both students and teachers. The lessons are teacher-led and student-centered, with teachers and museum staff working together to help children construct new knowledge for themselves. The BIG Lesson will provide teachers with professional development throughout the year. Teachers will be engaged in continuous collaboration with scientist, naturalists and other teachers as part of the development and execution of their week in the community. We are convinced that these experiences will change the way teachers' view teaching and learning. They will move from seeing field trips as a passive way to spend part of a day, to an engaged, comprehensive view of field trips as a unique opportunity to immerse students in deep teaching and learning. Once they have learned how to use their community as a classroom, teachers will seek other ways to make learning real to their students. We believe the BIG lesson is a model that will work to fundamentally change the way teachers teach. We look forward to implementing it and enjoying the excitement and learning that results.

**Calvin College**

040290-212

\$198,442

\$184,582

**Project Director: Ron Sjoerdsma**

616-526-6213

The goal of this program is to address the science education needs of the middle school classrooms of the Wyoming Public Schools and of the Calvin Christian School Association. This effort will focus on three areas: 1) Developing a coherent science curriculum for all the target schools that is based on the Michigan Curriculum Framework, and which is appropriate for the needs of a diverse set of learners. The curriculum will be inquiry-based in order to foster reflection on and the construction of scientific knowledge. 2) In-service science education training and mentoring of teachers in our target area so that they will become conversant in the benchmarks and expectations of the Curriculum Framework, and so they can provide quality science experiences for all learners. 3) A plan to insure the continuation of excellent science instruction and curriculum development after the end of this grant, and a mechanism to provide for the dissemination of the work accomplished during the grant.

**Central Michigan University**

040290-213

\$198,598

\$184,738

**Project Director: Timothy Brannan**

989-774-6467

The goal of the “Building Capacity in Science Instruction to Improve Student Achievement” project are clearly and directly aligned with the national and state goals defined in the Report of the Ensuring Excellent Educators Task Force: teacher quality, highly qualified teachers, and improved student achievement among children at risk of school failure. In order to achieve these goals, Central Michigan University will collaborate with Eaton Intermediate School District, Clinton County Regional Educational Service Agency and the Capital Area Science and Math Center to provide research-based professional development opportunities for teachers in two eligible LEAs Maple Valley and Ovid Elsie School Districts.

This proposal will assist targeted teachers in becoming Highly Qualified by either 1) working toward a master’s degree in a science subject, or 2) by preparing to take the Teacher Test of Competency, or 3) by meeting the standards outlined in High Objective Uniform State Standard of Evaluation. Another chief goal of this project is to improve student achievement in science as evidenced by an increase in MEAP Science scores by 10% and other assessments of student work. In addition participants will learn how to integrate technology into their instruction more effectively and gain competence in their use of technology.

**Saginaw Valley State University**

040290-215

\$200,000

\$186,140

**Project Director: Dr. Walter R. Rathkamp**

989-964-4117

The primary purpose of the project is to identify professional development needs for science teachers in the K-12 continuum and develop an individualized self-improvement plan for each teacher. Teacher needs will be matched with existing programs or through the development of new workshops, courses, and presentations. Constructive teaching, teacher mentoring through demonstration and modeling, the integration of technology, and an increased ability to assess student achievement are key components of the project. Increased student achievement in science is the major goal of the project.

**Spring Arbor College**

040290-216

\$172,665

\$158,805

**Project Director: Linda Schaub**

517-750-6394

The collaboration of Spring Arbor University, five county LEA school districts, and Jackson County Intermediate School District (JCISD) will provide elementary teachers with in-depth professional development and graduate coursework in the areas of science content and pedagogy and assessment literacy to approximately 75 elementary teachers will need to develop strong leadership skills in science. JCISD will assist the curriculum alignment, and workshops focused on building leadership capacity of the school principals. The Jackson County Mathematics and Science Center will provide the framework for Quality Science Instruction Team members through their Peer Collaboration Program.

### **Category 3: Partnership for Professional Development in Social Studies**

	<b><u>Amount Requested</u></b>	<b><u>Amount Recommended</u></b>
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**Central Michigan University**

040290-302

\$200,000

\$186,140

**Project Director: Renay Scott**

989-774-6467

The proposed American History Project (AHP) is collaboration between Central Michigan University, the Alpena-Montmorency-Alcona Educational Service District (AMA, ESD) three rural schools and the Jesse Besser Museum.

The overarching mission of this initiative will be to improve teacher's instructional techniques content knowledge and appreciation of American and Michigan History. This in turn will raise student achievement.

**Michigan Technological University**

040290-305

\$193,604

\$179,744

**Project Director: Bradley Baltensperger**

906-487-2920

The 2003-2005 Partnership in Professional Development in Social Studies (PPDSS) will consist of intensive Institutes, which enhance teachers' understanding of, and ability to integrate, geography, civics, economics, and history. This is accomplished through a focus on community land use. The experiential Institutes use the Michigan Curriculum Framework Standards as a guide with the goal of enhancing the ability of teachers to engage in students and increase the achievement of K-12 students. Target group teachers are from high need rural schools in the Upper Peninsula and the GRACEP consortium of Grand Rapids and West Ottawa schools.

**Michigan State University**

040290-306

\$156,159

\$142,299

**Project Director: Kris Morrissey**

517-353-1943

The cultural studies collaboration trains teachers in an innovation and research- based model for presenting social studies to youth. Teachers learn to develop thematic studies with strong content knowledge, surrounded by rich authentic cultural resources and driven by classroom themes that are interested and relevant to students.

The project is a partnership of Grand River Magnet School in Lansing, the Michigan State University Museum and the Museum Studies Program with strong content knowledge, surrounded by rich authentic, cultural resources and driven by classroom themes that are interested and relevant to students.

Cultural Studies provide a context for students to explore core social studies curriculum through activities that are personal, memorable and integrated with other contents. The approach addresses Grand River School's magnet theme of global cultures and celebrate the cultural diversity of its community.

**Central Michigan University**

040290-308

\$198,860

\$186,000

**Project Director: Michael Libbee**

989-774-6467

The Northern Michigan Achievement Project will combine the resources of Central Michigan University, the Michigan Geographic Alliance, the Northern Michigan Consortium, and the Grand Rapids School District to help individual teachers improve teaching by providing a range of services including support for parental involvement, targeted professional development, intensive teacher-training institutions, mentoring, and new technology-based instructional support. The Northern Michigan Achievement Project will use the assessment-focused strategies developed in Michigan Achievement Project to provide high-needs schools the support to improve student achievement, and prove it.

**Category 4: Partnership for Professional Development in the Arts****Amount Requested****Amount Recommended**

No grants awarded in this category however the Arts were funded in Category 5.

**Category 5: Sustained Learning****Amount Requested****Amount Recommended****Grand Valley State University**

040290-501

\$198,729

\$184,869

**Project Director: Maryanne Sheline, Karen Myers**

616-331-2515

The Building Science Leaders: Grade Level Facilitators (BSL:GLF) Program is an in-depth, two-year program to develop the capacity of elementary grade level teachers to effectively implement science curriculum. This program builds on the 2000-2002 work of the Regional Math and Science Center's previous Eisenhower Higher Education Grant; Building Science Leaders which developed building teacher leaders in area school districts. In each of these districts we intend to select two teachers per elementary building who are motivated to develop the skills, knowledge and attitudes necessary to help teacher colleagues and students make meaningful gains in science interest, understanding, and achievement. These facilitators will focus on curriculum implementation, including the development and modeling of exemplary lessons and the design and development of grade-level professional development using a kit-based model of instruction. In addition, the project will foster relationship among these grade level facilitators, the Building Science Leaders in their district, and those who will support them as well as the classroom teachers and Para pros in their building. 7

**Eastern Michigan University**

040290-502

\$57,430

\$57,430

**Project Director: Joanne Canigila, Ellen Hoffman**

734-487-3090

*Teachers Learning Together in Detroit* project extends the successful implementation of Lesson Study currently in Willow Run Community Schools to include a constellation of elementary schools in Detroit Public Schools (DPS). Lesson Study—a model for intensive, school based professional development used in Japan—is a strategy for change and improvement based on the direct study of teaching, with the goal of steady improvement in the mathematics learning of students. Lesson Study provides a way for teachers to look at their own practice “with new eyes.” This project targets the mathematical and pedagogical development of first-year, emergency-licensed, and/or out-of-field elementary teachers, in the Detroit Public Schools and their students’ mathematical achievement.

**Michigan State University**

040290-503

\$129,763

\$115,903

**Project Director: Lynnette Overby**

517-432-5578

The proposed project “Creating and Maintaining an Arts Integrated Curriculum” is designed to promote the inclusion of dance, theatre, and creative writing as integrating disciplines. Teachers from Riddle Middle School, Everett High School, Sheridan and Grandriver Elementary Schools Shabazz and Sankofa Academy will receive in-depth training at a 3 day Summer Institute. During the institute, they will become immersed in creative dance, creative drama and creative writing experiences and lessons that are designed to reflect the Michigan standards and benchmarks. The teachers will design lessons based on their own curricular needs and plan for the application of their learning in the classroom. Finally, they will receive guidance in designing and evaluating appropriate assessment instruments. After the summer institutes, the teachers will be invited to participate in an on-line computer mediated communication based on their classroom experiences. They will attend additional workshops, and their students will maintain portfolios to document their learning. Artist Fellows, dance and theatre students from Michigan State University will assist the teacher with ongoing support in the arts. The resulting lessons and units will be posted on the Program for Interdisciplinary Learning Through Arts websites. Presentations and publications will be prepared and presented. The ultimate goal of this ongoing line of outreach/research is to demonstrate the power of the arts to enhance learning and achievement across the curriculum.